

REMARKS/ARGUMENTS

The claims are 1-8 and 10-14.

A preliminary amendment for the subject application was filed June 30, 2003 and thus evidently crossed the first action in the subject application, which was mailed one day later on July 1, 2003.

The preliminary amendment clarified the language in the specification and in Claims 1 and 4 by replacing "a substituent" with "substituent(s)".

In addition, Claims 11 to 14 were added. These were not addressed in the Official Action.

The substance of Claims 1 to 10 was unchanged by the preliminary amendment.

The present amendment redefines the substituents for the "aryl group" alternative for R¹ in Claims 1 and 14.

As here amended, the aryl group R¹ is specified to be "substituted by halogen at the ortho position relative to the point of attachment of R¹ to A" and to be "also substituted by substituent(s) selected from the group consisting of". "Halogen" is limited to "bromo" (page 5, the paragraph at line 37, and see original Claims 2 and 3).

The recitation of the substituents for the heterocyclic group alternative for R¹ is left unchanged.

In addition, compounds (36) and (37) are deleted from Claim 5.

In Claim 8, the listing of medical conditions is reduced.

In Claim 10, the patient treatment step is for a disease treatable with a pharmaceutical compound having hypoglycemic activity, basis for which appear at page 88, lines 33-36.

THE DETAILED ACTION

Reconsideration and withdrawal of the rejection of Claims 1-10 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-10 of U.S. Patent No. 6,242,474 to Yamasaki et al. are requested.

The justification for the rejection is that “the instant claimed invention is generically described in the patent.” Such justification is clearly inappropriate to support a double patenting rejection which requires resort to the claims only.

As here amended, Claim 1 limits R¹ (which corresponds to A in formula (I) of the reference Claim 1) to a specified structure, particularly when R¹ is aryl. Claim 1 defines its A as “an aromatic ring that may have one or more substituents.” This is clearly insufficient to suggest the substituents recited in the currently amended Claim 1. It is noted that compound 35 of the reference is not embraced by the subject currently amended Claim 1. Nor are the compounds 34 and 36 to 42, in which the A group corresponding to Applicants’ A group contains two chlorine substituents, excluded by the subject currently amended claims. This is true of all the imidazol compounds named at col. 17, line 65 to col. 18, line 17 of Yamasaki et al.

Reconsideration of the withdrawal of the rejection of Claim 10 under 35 U.S.C. § 112, first paragraph, as failing to comply with enablement requirement are requested.

As currently amended, claim 10 calls for administering to the patient the subject compound when the disease in the patient is one treatable with a pharmaceutical having hypoglycemic activity. It would appear that the stated rejection does not apply to the claim so amended which recites but a single identifiable aspect of a disease, the treatment of which is well established in the prior art. Basis appears in the specification at page 88, lines 33 to 36.

Reconsideration and withdrawal of the rejection of Claims 1-10 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention are requested.

The spacing needed after “substituent” in Claim 1 was supplied in the preliminary amendment.

Claim 2 in fact does further limit Claim 1 and Claims 30 and 31 are embraced by Claim 1. The definition of aryl as employed in the subject application includes alkyl-substituted alkyl, please see this application, page 6, the paragraph at line 34. Accordingly, the “(phenoxyethyl)benzyl” is included within -A-R¹ where R¹ is aryl substituted with aryloxy.

Applicants definition and usage of “aryl” is consistent with recognized usage, witness the attached pages 817, 820 of the well known text, Morrison and Boyd, Organic Chemistry, 3rd ed., 1973. Here tolyl is presented as an example of aryl.

In order to make the usage of “aryl” apparent in the claims, Claims 1, 11 and 14 are amended to recite “where aryl is defined as unsubstituted aryl or alkyl-substituted aryl.”

Claim 10 is amended to recite the crucial disclosed pharmaceutical function. Accordingly, reconsideration and withdrawal of the stated rejection under 35 U.S.C. § 101 is solicited.

The rejection of Claim 9 under 35 U.S.C. § 101 because the claimed invention is directed to nonstatutory subject matter is moot in view of the deletion of the claim.

Reconsideration and withdrawal of the rejection of Claims 1 and 7-10 under 35 U.S.C. § 102(a) as being anticipated by Yamasaki et al. (WO 99/00359) are requested.

As presently amended, the claims are not anticipated by the Yamasaki et al. disclosure.

As noted above, in Yamasaki et al. Example 35, the group dichlorobenzyl of Yamasaki corresponding in position to Applicants' -A-R¹ moiety, is not within the scope of A-R¹ as recited in the currently amended claims. The same comment applies to all the other imidazole compounds specifically named in the Yamasaki et al. disclosure.

In addition, a sworn copy of the translation of the priority document accompanies this response. It is evident from the attached Derwent abstracts, that the filing date of the priority document antedates the earliest publication or 102(e) date of the application Yamasaki et al. patent, the international filing date for which is before November 29, 2000.

Reconsideration and withdrawal of the rejection of Claims 1-10 under 35 U.S.C. § 103(a) as being unpatentable over Yamasaki et al. (WO 99/00359) are requested.

The disclosure in the applied references is not shown to suggest the compounds defined in the currently amended claims.

In addition, in view of the submitted translation of the priority document, the applied Yamasaki et al. patent is not prior art under 35 U.S.C. §103.

Claims 11-14 are also allowable for the reasons given above.

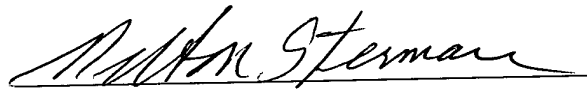
With respect to the comment regarding the International Search Report, please note that the relevant documents were listed in the IDS filed November 21, 2001, a copy of which and also of the dated filing receipt are included. Acknowledgment by the Examiner is solicited.

Application No. 09/869,135
Reply to Office Action of July 1, 2003

Favorable reconsideration is solicited.

Respectfully submitted,

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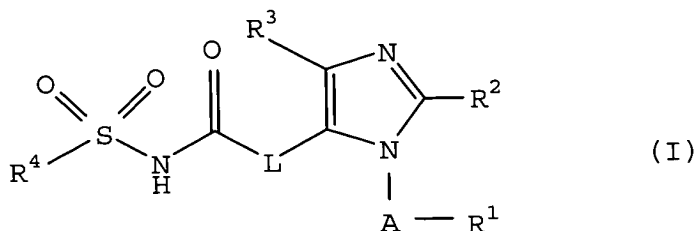
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IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An imidazole compound of the formula (I):



wherein

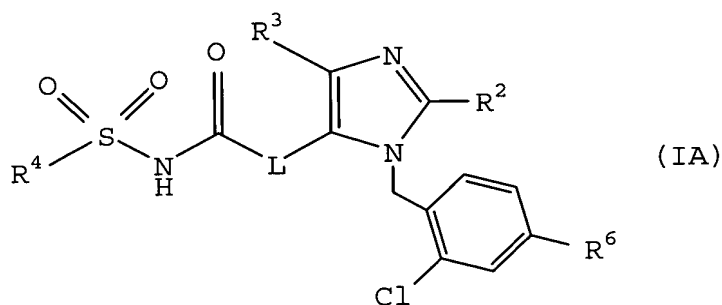
R^1 is an aryl which is substituted by halogen at the ortho position relative to the point of attachment of R_1 to A, and also ~~or heterocyclic group~~ substituted by substituent(s) selected from the group consisting of (1) aryl, (2) heterocyclic group, (3) ~~halogen bromo~~, (4) halo(lower)alkyl, (5) lower alkylthio, (6) nitro, (7) lower alkenyl optionally substituted by aryl, (8) lower alkynyl optionally substituted by aryl, (9) lower alkoxy optionally substituted by cyclo(lower)alkyl or aryl, (10) aryloxy and (11) amino optionally substituted by protected carboxy or lower alkyl or R^1 is a heterocyclic group substituted by substituent(s) selected from the group consisting of (1) aryl, (2) heterocyclic group, (3) halogen, (4) halo(lower)alkyl, (5) lower alkylthio, (6) nitro, (7) lower alkenyl optionally substituted by aryl, (8) lower alkynyl optionally substituted by aryl, (9) lower alkoxy optionally substituted by cyclo(lower)alkyl or aryl, (10) aryloxy and (11) amino optionally substituted by protected carboxy or lower alkyl;

R^2 is a lower alkyl;

R^3 is a hydrogen, halogen, lower alkyl or nitro;

- R^4 is (1) a lower alkenyl optionally substituted by aryl or heterocyclic group, (2) aryl optionally substituted by lower alkenyl, (3) lower alkyl, or (4) heterocyclic group optionally substituted by halogen;
- A is a lower alkylene; and
- L is a single bond, lower alkenylene or lower alkylene optionally substituted by aryl or heterocyclic group, or $-X-CH_2-$ wherein X is $-O-$, NR^5 wherein R^5 is hydrogen or lower alkyl, or $-S-$,
where aryl is defined as unsubstituted aryl or alkyl-substituted aryl,
or a salt thereof.

Claim 2 (Original): The imidazole compound of claim 1, which has the formula (IA):



wherein

- R^2 is methyl;
- R^3 is chlorine;
- R^4 is (1) lower alkenyl optionally substituted by aryl, (2) aryl, (3) lower alkyl, or (4) heterocyclic group optionally substituted by halogen;
- R^6 is (1) aryl, (2) heterocyclic group, (3) bromine, (4) halo(lower)alkyl, (5) lower alkylthio, (6) nitro, (7) lower alkenyl substituted by aryl, (8) lower alkynyl substituted by aryl, (9) lower alkoxy optionally

substituted by cyclo(lower)alkyl or aryl, (10) lower alkyl optionally substituted by aryloxy, or (11) amino optionally substituted by protected carboxy or lower alkyl; and

L is ethenylene,
or a salt thereof.

Claim 3 (Original): The imidazole compound of claim 2, wherein R⁴ is aryl, or lower alkenyl optionally substituted by aryl, R⁶ is bromine, lower alkenyl substituted by aryl, lower alkynyl substituted by aryl, or lower alkoxy optionally substituted by cyclo(lower)alkyl, or a salt thereof.

Claim 4 (Previously Presented): The imidazole compound of claim 1, wherein R¹ is heterocyclic group substituted by substituent(s) selected from the group consisting of (1) aryl, (2) heterocyclic group, (3) halogen, (4) halo(lower)alkyl, (5) lower alkylthio, (6) nitro, (7) lower alkenyl optionally substituted by aryl, (8) lower alkynyl optionally substituted by aryl, (9) lower alkoxy optionally substituted by cyclo(lower)alkyl or aryl, (10) aryloxy and (11) amino optionally substituted by protected carboxy or lower alkyl, or a salt thereof.

Claim 5 (Currently Amended): The imidazole compound of claim 1, which is:

(1) (E)-3-(4-chloro-1-(2-chloro-4-(2-furyl)benzyl)-2-methylimidazol-5-yl)-N-((4-methylbenzene)sulfonyl)-2-propenamide,

(2) (2E)-3-(4-chloro-1-(2-chloro-4-(2-furyl)benzyl)-2-methylimidazol-5-yl)-N-(((E)-2-phenylethenyl)sulfonyl)-2-propenamide,

(3) (E)-3-(4-chloro-1-(2-chloro-4-(2-thienyl)benzyl)-2-methylimidazol-5-yl)-N-((4-methylbenzene)sulfonyl)-2-propenamide,

- (4) (2E)-3-(4-chloro-1-(2-chloro-4-(2-thienyl)benzyl)-2-methylimidazol-5-yl)-N-(((E)-2-phenylethenyl)sulfonyl)-2-propenamide,
- (5) (E)-3-(4-chloro-1-(2-chloro-4-(phenylethynyl)benzyl)-2-methylimidazol-5-yl)-N-((4-methylbenzene)sulfonyl)-2-propenamide,
- (6) (2E)-3-(4-chloro-1-(2-chloro-4-(phenylethynyl)benzyl)-2-methylimidazol-5-yl)-N-(((E)-2-phenylethenyl)sulfonyl)-2-propenamide,
- (7) (E)-3-(1-(4-bromo-2-chlorobenzyl)-4-chloro-2-methylimidazol-5-yl)-N-((4-methylbenzene)sulfonyl)-2-propenamide,
- (8) (E)-3-(1-(4-bromo-2-chlorobenzyl)-4-chloro-2-methylimidazol-5-yl)-N-(((E)-2-phenylethenyl)sulfonyl)-2-propenamide,
- (9) (E)-3-[4-chloro-1-(2-chloro-4-phenylbenzyl)-2-methylimidazol-5-yl]-N-(1-pentanesulfonyl)-2-propenamide,
- (10) (E)-N-benzenesulfonyl-3-[4-chloro-1-(2-chloro-4-phenylbenzyl)-2-methylimidazol-5-yl]-2-propenamide,
- (11) (E)-3-[4-chloro-1-(2-chloro-4-phenylbenzyl)-2-methylimidazol-5-yl]-N-((4-methylbenzene)sulfonyl)-2-propenamide,
- (12) (E)-3-(4-chloro-1-(2-chloro-4-phenylbenzyl)-2-methylimidazol-5-yl)-N-(((E)-2-phenylethenyl)sulfonyl)-2-propenamide,
- (13) (E)-3-(4-chloro-1-(2-chloro-4-phenylbenzyl)-2-methylimidazol-5-yl)-N-((5-chloro-2-thienyl)sulfonyl)-2-propenamide,
- (14) (E)-N-((5-bromo-2-thienyl)sulfonyl)-3-(4-chloro-1-(2-chloro-4-phenylbenzyl)-2-methylimidazol-5-yl)-2-propenamide,
- (15) (E)-3-((4-chloro-1-(2-chloro-4-(1-propoxy)benzyl)-2-methylimidazol-5-yl)-N-((4-methylbenzene)sulfonyl)-2-propenamide,

(16) (E)-3-(4-chloro-1-(2-chloro-4-(1-propoxy)benzyl)-2-methylimidazol-5-yl)-N-(((E)-2-phenylethenyl)sulfonyl)-2-propenamide,

(17) (E)-3-(4-chloro-1-(2-chloro-4-(1-pentyloxy)benzyl)-2-methylimidazol-5-yl)-N-((4-methylbenzene)sulfonyl)-2-propenamide,

(18) (E)-3-(4-chloro-1-(2-chloro-4-(1-pentyloxy)benzyl)-2-methylimidazol-5-yl)-N-(((E)-2-phenylethenyl)sulfonyl)-2-propenamide,

(19) (E)-3-(4-chloro-1-(2-chloro-4-((cyclopentyl)methyloxy)-benzyl)-2-methylimidazol-5-yl)-N-(1-pentanesulfonyl)-2-propenamide,

(20) (E)-3-(4-chloro-1-(2-chloro-4-((cyclopentyl)methyloxy)-benzyl)-2-methylimidazol-5-yl)-N-((4-methylbenzene)sulfonyl)-2-propenamide,

(21) (2E)-3-(4-chloro-1-(2-chloro-4-((cyclopentyl)methyloxy)-benzyl)-2-methylimidazol-5-yl)-N-(((E)-2-phenylethenyl)sulfonyl)-2-propenamide,

(22) (E)-3-(4-chloro-1-(2-chloro-4-((cyclohexyl)methyloxy)-benzyl)-2-methylimidazol-5-yl)-N-((4-methylbenzene)sulfonyl)-2-propenamide,

(23) (2E)-3-(4-chloro-1-(2-chloro-4-((cyclohexyl)methyloxy)-benzyl)-2-methylimidazol-5-yl)-N-(((E)-2-phenylethenyl)sulfonyl)-2-propenamide,

(24) (E)-3-(1-(4-benzyloxy-2-chlorobenzyl)-4-chloro-2-methylimidazol-5-yl)-N-((4-methylbenzene)sulfonyl)-2-propenamide,

(25) (E)-3-(1-(4-benzyloxy-2-chlorobenzyl)-4-chloro-2-methylimidazol-5-yl)-N-(((E)-2-phenylethenyl)sulfonyl)-2-propenamide,

(26) (E)-3-(4-chloro-1-(2-chloro-4-(methylthio)benzyl)-2-methylimidazol-5-yl)-N-((4-methylbenzene)sulfonyl)-2-propenamide,

(27) (E)-3-(4-chloro-1-(2-chloro-4-(methylthio)benzyl)-2-methylimidazol-5-yl)-N-(((E)-2-phenylethenyl)sulfonyl)-2-propenamide,

(28) (E)-3-(4-chloro-1-(2-chloro-4-(trifluoromethyl)benzyl)-2-methylimidazol-5-yl)-N-((4-methylbenzene)sulfonyl)-2-propenamide,

(29) (E)-3-(4-chloro-1-(2-chloro-4-(trifluoromethyl)benzyl)-2-methylimidazol-5-yl)-N-(((E)-2-phenylethenyl)sulfonyl)-2-propenamide,

(30) (E)-3-(4-chloro-1-(2-chloro-4-(phenoxymethyl)benzyl)-2-methylimidazol-5-yl)-N-((4-methylbenzene)sulfonyl)-2-propenamide,

(31) (E)-3-(4-chloro-1-(2-chloro-4-(phenoxymethyl)benzyl)-2-methylimidazol-5-yl)-N-(((E)-2-phenylethenyl)sulfonyl)-2-propenamide,

(32) (E)-3-(4-chloro-1-(2-chloro-4-nitrobenzyl)-2-methylimidazol-5-yl)-N-((4-methylbenzene)sulfonyl)-2-propenamide,

(33) (E)-3-(4-chloro-1-(2-chloro-4-nitrobenzyl)-2-methylimidazol-5-yl)-N-(((E)-2-phenylethenyl)sulfonyl)-2-propenamide,

(34) (E)-3-(4-chloro-1-(2-chloro-4-((E)-2-phenylethenyl)benzyl)-2-methylimidazol-5-yl)-N-((4-methylbenzene)sulfonyl)-2-propenamide,

(35) (E)-3-(4-chloro-1-(2-chloro-4-((E)-2-phenylethenyl)benzyl)-2-methylimidazol-5-yl)-N-(((E)-2-phenylethenyl)sulfonyl)-2-propenamide,

~~(36) (E)-3-(1-(1-bromo-2-naphthyl)-4-chloro-2-methylimidazol-5-yl)-N-((4-methylbenzene)sulfonyl)-2-propenamide,~~

~~(37) (E)-3-(1-(1-bromo-2-naphthyl)-4-chloro-2-methylimidazol-5-yl)-N-(((E)-2-phenylethenyl)sulfonyl)-2-propenamide,~~

(38) (E)-3-(4-chloro-1-(2-chloro-4-(1-pentyloxy)benzyl)-2-methylimidazol-5-yl)-N-(1-pentanesulfonyl)-2-propenamide,

(39) (E)-3-(4-chloro-1-(2-chloro-4-(1-pentyloxy)benzyl)-2-methylimidazol-5-yl)-N-((E)-1-penten-1-ylsulfonyl)-2-propenamide,

- (40) (E)-N-(1-butanesulfonyl)-3-(4-chloro-1-(2-chloro-4-(1-pentyloxy)benzyl)-2-methylimidazol-5-yl)-2-propenamide,
- (41) (E)-3-(4-chloro-1-(2-chloro-4-((E)-2-phenylethenyl)benzyl)-2-methylimidazol-5-yl)-N-(1-pentanesulfonyl)-2-propenamide,
- (42) (E)-3-(4-chloro-1-(2-chloro-4-((E)-2-phenylethenyl)benzyl)-2-methylimidazol-5-yl)-N-((E)-1-penten-1-ylsulfonyl)-2-propenamide,
- (43) (E)-N-(1-butanesulfonyl)-3-(4-chloro-1-(2-chloro-4-(((E)-2-phenylethenyl)benzyl)-2-methylimidazol-5-yl)-2-propenamide,
- (44) (E)-3-(4-chloro-1-(2-chloro-4-(phenylethynyl)benzyl)-2-methylimidazol-5-yl)-N-(1-pentanesulfonyl)-2-propenamide,
- (45) (E)-3-(4-chloro-1-(2-chloro-4-(phenylethynyl)benzyl)-2-methylimidazol-5-yl)-N-((E)-1-penten-1-ylsulfonyl)-2-propenamide,
- (46) (E)-N-(1-butanesulfonyl)-3-(4-chloro-1-(2-chloro-4-(2-phenylethynyl)benzyl)-2-methylimidazol-5-yl)-2-propenamide,
- (47) (E)-3-(4-chloro-1-((3-chloro-5-(trifluoromethyl)pyridin-2-yl)methyl)-2-methylimidazol-5-yl)-N-((E)-2-phenylethenylsulfonyl)-2-propenamide,
- (48) (E)-3-(4-chloro-1-((3-chloro-5-(trifluoromethyl)pyridin-2-yl)methyl)-2-methylimidazol-5-yl)-N-((4-methylbenzene)sulfonyl)-2-propenamide,
- (49) (E)-3-(1-(4-(tert-butoxycarbonylamino)-2-chlorobenzyl)-4-chloro-2-methylimidazol-5-yl)-N-(1-pentanesulfonyl)-2-propenamide,
- (50) (E)-3-(1-(4-(tert-butoxycarbonylamino)-2-chlorobenzyl)-4-chloro-2-methylimidazol-5-yl)-N-((E)-1-penten-1-ylsulfonyl)-2-propenamide,
- (51) (E)-3-(1-(4-(tert-butoxycarbonylamino)-2-chlorobenzyl)-4-chloro-2-methylimidazol-5-yl)-N-(((E)-2-phenylethenyl)sulfonyl)-2-propenamide,

- (52) (E)-3-(4-chloro-1-(2-chloro-4-(1-pentyloxy)benzyl)-2-ethylimidazol-5-yl)-N-((E)-2-phenylethanesulfonyl)-2-propenamide,
- (53) (E)-3-(1-(4-bromo-2-chlorobenzyl)-4-chloro-2-ethylimidazol-5-yl)-N-((E)-2-phenylethanesulfonyl)-2-propenamide,
- (54) (E)-3-(4-chloro-1-(2-chloro-4-(phenylethynyl)benzyl)-2-ethylimidazol-5-yl)-N-((E)-2-phenylethanesulfonyl)-2-propenamide,
- (55) (E)-3-(4-chloro-1-(2-chloro-4-(phenylethynyl)benzyl)-2-ethylimidazol-5-yl)-N-((4-methylbenzene)sulfonyl)-2-propenamide,
- (56) (E)-N-(1-butanesulfonyl)-3-(4-chloro-1-(2-chloro-4-(phenylethynyl)benzyl)-2-ethylimidazol-5-yl)-2-propenamide,
- (57) (E)-3-(4-chloro-1-(2-chloro-4-(phenylethynyl)benzyl)-2-ethylimidazol-5-yl)-N-(1-pentanesulfonyl)-2-propenamide,
- (58) (E)-3-(4-chloro-1-(2-chloro-4-(phenylethynyl)benzyl)-2-ethylimidazol-5-yl)-N-((E)-1-penten-1-ylsulfonyl)-2-propenamide,
- (59) (E)-3-(4-chloro-1-(2-chloro-4-((E)-2-phenylethenyl)benzyl)-2-ethylimidazol-5-yl)-N-((E)-2-phenylethanesulfonyl)-2-propenamide,
- (60) (E)-3-(4-chloro-1-(2-chloro-4-((E)-2-phenylethenyl)benzyl)-2-ethylimidazol-5-yl)-N-(4-methylbenzenesulfonyl)-2-propenamide,
- (61) (E)-N-(1-butanesulfonyl)-3-(4-chloro-1-(2-chloro-4-((E)-2-phenylethenyl)benzyl)-2-ethylimidazol-5-yl)-2-propenamide,
- (62) (E)-3-(4-chloro-1-(2-chloro-4-((E)-2-phenylethenyl)benzyl)-2-ethylimidazol-5-yl)-N-(1-pentanesulfonyl)-2-propenamide,
- (63) (E)-3-(4-chloro-1-(2-chloro-4-((E)-2-phenylethenyl)benzyl)-2-ethylimidazol-5-yl)-N-((E)-1-penten-1-ylsulfonyl)-2-propenamide,

- (64) (E)-3-(1-(4-bromo-2-chlorobenzyl)-2,4-dimethylimidazol-5-yl)-N-((E)-2-phenylethanesulfonyl)-2-propenamide,
- (65) (E)-3-(4-bromo-1-(2-chloro-4-(1-pentyloxy)benzyl)-2-methylimidazol-5-yl)-N-((E)-2-phenylethanesulfonyl)-2-propenamide,
- (66) (E)-3-(1-(2-chloro-4-(1-pentyloxy)benzyl)-4-ethyl-2-methylimidazol-5-yl)-N-((E)-2-phenylethanesulfonyl)-2-propenamide,
- (67) (E)-2-benzyl-3-(1-(2-chloro-4-(1-pentyloxy)benzyl)-2-methylimidazol-5-yl)-N-((E)-2-phenylethanesulfonyl)-2-propenamide,
- (68) (E)-3-(1-(2-chloro-4-(1-pentyloxy)benzyl)-2-methylimidazol-5-yl)-2-(1-pentyl)-N-((E)-2-phenylethanesulfonyl)-2-propenamide,
- (69) (E)-3-(1-(2-chloro-4-(1-pentyloxy)benzyl)-2-methylimidazol-5-yl)-2-(3-pyridyl)methyl-N-((E)-2-phenylethanesulfonyl)-2-propenamide,
- (70) (E)-3-(1-(2-chloro-4-(1-pentyloxy)benzyl)-2-methylimidazol-5-yl)-2-methyl-N-((E)-2-phenylethanesulfonyl)-2-propenamide,
- (71) (E)-3-(4-chloro-1-(2-chloro-4-(1-pentyloxy)benzyl)-2-methylimidazol-5-yl)-2-methyl-N-((E)-2-phenylethanesulfonyl)-2-propenamide,
- (72) 4-chloro-1-(2-chloro-4-(1-pentyloxy)benzyl)-2-methyl-5-((E)-2-phenylethanesulfonyl)carbamoyl)-1H-imidazole,
- (73) (4-chloro-1-(2-chloro-4-(1-pentyloxy)benzyl)-2-methyl-1H-imidazol-5-yl)methyl N-(4-methylbenzenesulfonyl)carbamate,
- (74) 4-chloro-1-(2-chloro-4-(1-pentyloxy)benzyl)-5-((3-(4-methylbenzenesulfonyl)ureido)methyl)-2-methyl-1H-imidazole,
- (75) 4-chloro-1-(2-chloro-4-(1-pentyloxy)benzyl)-5-((3-(4-methylbenzenesulfonyl)-1-methylureido)methyl)-2-methyl-1H-imidazole or

(76) 3-(4-chloro-1-(2-chloro-4-(phenylacethynyl)benzyl)-2-ethylimidazol-5-yl)-N-((E)-1-penten-1-ylsulfonyl)-(E)-2-propenamide,
or a salt thereof.

Claim 6 (Original): The imidazole compound of claim 1, which is:

(E)-3-(4-chloro-1-(2-chloro-4-(phenylethynyl)benzyl)-2-methylimidazol-5-yl)-N-((4-methylbenzene)sulfonyl)-2-propanamide,

(E)-3-(4-chloro-1-(2-chloro-4-(1-pentyloxy)benzyl)-2-methylimidazol-5-yl)-N-(((E)-2-phenylethenyl)sulfonyl)-2-propanamide,

(E)-3-(4-chloro-1-(2-chloro-4-(phenylethynyl)benzyl)-2-ethylimidazol-5-yl)-N-((4-methylbenzene)sulfonyl)-2-propenamide,

(E)-3-(4-chloro-1-(2-chloro-4-(phenylethynyl)benzyl)-2-ethylimidazol-5-yl)-N-(1-pentanesulfonyl)-2-propenamide or

(E)-3-(4-chloro-1-(2-chloro-4-(phenylethynyl)benzyl)-2-ethylimidazol-5-yl)-N-((E)-1-penten-1-ylsulfonyl)-2-propenamide,

or a salt thereof.

Claim 7 (Original): A pharmaceutical composition containing the imidazole compound of claim 1 or a pharmaceutically acceptable salt thereof.

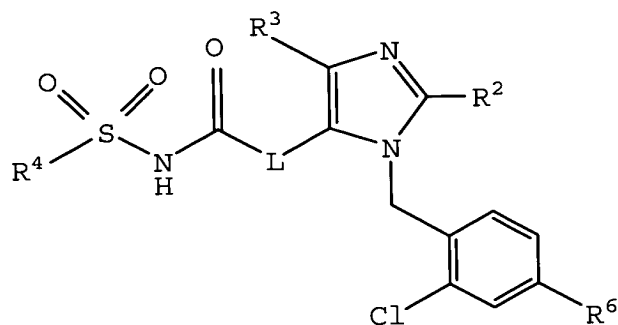
Claim 8 (Currently Amended): A pharmaceutical preparation containing the imidazole compound of claim 1 or a pharmaceutically acceptable salt thereof, which is used as an agent for the prophylaxis ~~and/or~~ or treatment of impaired glucose tolerance disorder, diabetes, gestational diabetes, diabetic complications, insulin resistance syndrome, polycystic ovary syndrome, hyperlipidemia, atherosclerosis, cardiovascular diseases, hyperglycemia,

pancreatitis, osteoporosis, hyperuricemia, hypertension, inflammatory bowel diseases[[,]] or
skin disorders related to an anomaly of differentiation of epidermic cells, ~~angina pectoris,~~
~~pulmonary hypertension, congestive heart failure, glomerulopathy, tubulointerstitial~~
~~disorders, renal failure, angiostenosis, peripheral vascular diseases, cerebral apoplexy,~~
~~chronic reversible obstructive impairment, autoimmune diseases, allergic rhinitis, urticaria,~~
~~glaucoma, diseases characterized by impaired intestinal motility, impotence, nephritis, cancer~~
~~cachexia, restenosis after PTCA, or cachexia.~~

Claim 9 (Canceled).

Claim 10 (Currently Amended): A method of preventing and/or treating ~~impaired~~
~~glucose tolerance disorder, diabetes, gestational diabetes, diabetic complications, insulin~~
~~resistance syndrome, polycystic ovary syndrome, hyperlipidemia, atherosclerosis,~~
~~cardiovascular diseases, hyperglycemia, pancreatitis, osteoporosis, hyperuricemia,~~
~~hypertension, inflammatory bowel diseases, skin disorders related to an anomaly of~~
~~differentiation of epidermic cells, angina pectoris, pulmonary hypertension, congestive heart~~
~~failure, glomerulopathy, tubulointerstitial disorders, renal failure, angiostenosis, peripheral~~
~~vascular diseases, cerebral apoplexy, chronic reversible obstructive impairment, autoimmune~~
~~diseases, allergic rhinitis, urticaria, glaucoma, diseases characterized by impaired intestinal~~
~~motility, impotence, nephritis, cancer cachexia, restenosis after PTCA, or cachexia, a disease~~
in a patient treatable with a pharmaceutical compound having hypoglycemic activity, which
comprises administering to the patient the hypoglycemically active imidazole compound of
claim 1 or a pharmaceutically acceptable salt thereof.

Claim 11 (Currently Amended): An imidazole compound of the formula:



wherein

R^2 is a lower alkyl;

R^3 is a hydrogen, halogen, lower alkyl or nitro;

R^4 is (1) a lower alkenyl optionally substituted by aryl or heterocyclic group, (2) aryl optionally substituted by lower alkenyl, (3) lower alkyl, or (4) heterocyclic group optionally substituted by halogen;

R^6 is (1) aryl, (2) heterocyclic group, (3) bromine, (4) halo(lower)alkyl, (5) lower alkylthio, (6) nitro, (7) lower alkenyl optionally substituted by aryl, (8) lower alkynyl optionally substituted by aryl, (9) lower alkoxy optionally substituted by cyclo(lower)alkyl or aryl, (10) lower alkyl optionally substituted by aryloxy, or (11) amino optionally substituted by lower alkoxy or lower alkyl; and

L is (1) lower alkenylene or lower alkylene optionally substituted by aryl or heterocyclic group, (2) $-O-CH_2-$, (3) $-NR^5-CH_2-$ [wherein R^5 is hydrogen or lower alkyl], or (4) $-S-CH_2-$,

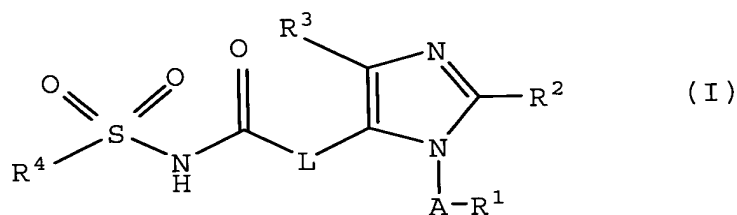
where aryl is defined as unsubstituted aryl or alkyl-substituted aryl,

or a salt thereof.

Claim 12 (Previously Presented): The imidazole compound of claim 11, wherein R³ is chlorine and L is ethenylene.

Claim 13 (Previously Presented): The imidazole compound of claim 12, wherein R⁶ is lower alkenyl optionally substituted by phenyl or lower alkynyl optionally substituted by phenyl.

Claim 14 (Currently Amended): A method for producing an imidazole compound of the formula (I):



wherein

R¹ is an aryl which is substituted by halogen at the ortho position relative to the point of attachment of R₁ to A, and also ~~or heterocyclic group~~ substituted by substituent(s) selected from the group consisting of (1) aryl, (2) heterocyclic group, (3) ~~halogen~~ bromo, (4) halo(lower)alkyl, (5) lower alkylthio, (6) nitro, (7) lower alkenyl optionally substituted by aryl, (8) lower alkynyl optionally substituted by aryl, (9) lower alkoxy optionally substituted by cyclo(lower)alkyl or aryl, (10) aryloxy and (11) amino optionally substituted by protected carboxy or lower alkyl or R¹ is a heterocyclic group substituted by substituent(s) selected from the group consisting of (1) aryl, (2) heterocyclic group, (3) halogen, (4) halo(lower)alkyl, (5) lower alkylthio, (6) nitro, (7) lower alkenyl optionally substituted by aryl, (8) lower alkynyl optionally

substituted by aryl, (9) lower alkoxy optionally substituted by cyclo(lower)alkyl or aryl, (10) aryloxy and (11) amino optionally substituted by protected carboxy or lower alkyl;

R² is a lower alkyl;

R³ is a halogen, lower alkyl or nitro;

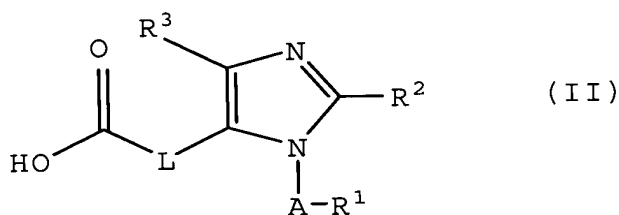
R⁴ is (1) a lower alkenyl optionally substituted by aryl or heterocyclic group, (2) aryl optionally substituted by lower alkenyl, (3) lower alkyl, or (4) heterocyclic group optionally substituted by halogen;

A is a lower alkylene; and

L is (1) lower alkenylene or lower alkylene optionally substituted by aryl or heterocyclic group, (2) -O-CH₂-, (3) -NR⁵-CH₂- [wherein R⁵ is hydrogen or lower alkyl], or (4) -S-CH₂-,

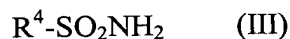
where aryl is defined as unsubstituted aryl or alkyl-substituted aryl,

or a salt thereof, which method comprising reacting a compound of the formula (II):



wherein R¹, R², R³, A and L are as defined above,

or reactive derivative at carboxy thereof or a salt thereof with a compound of the formula (III):



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wherein R^4 is as defined above,

or a salt thereof.